Message

From: Daguillard, Robert [Daguillard.Robert@epa.gov]

Sent: 5/28/2019 8:00:29 PM

To: OCSPP Daily Clips [OCSPP-Daily-Clips@epa.gov]

Subject: OCSPP Clips, 28 May 2019

Dayton Daily News: Sen. Portman calls environmental agency's process "rigorous yet lengthy."

The Hill: Lawmakers, Trump agencies set for clash over chemicals in water

Michigan Live: In quest to destroy PFAS, MSU diamond tech shows promise

PublicSource: Report details PFAS contamination near Pittsburgh airport that 'likely' extends beyond military base boundaries

WBUR - On Point - Save The Bees: EPA Bans 12 Pesticides Harmful To Honeybees

Independent (Dublin, Ireland): Appeal to farmers after pesticide detected in drinking water in Mayo

MedicalXPress: French watchdog bans sale of common pesticide

Midwest Center for Investigative Reporting: Glyphosate use increases dramatically across the Midwest

The Technology Market: Revenue from the Sales of Biological Pesticide to Increase Exponentially During 2017 – 2025

Truthout: Export of Banned US Pesticides Creates a Deadly Circle of Poison

Truthout: Export of Banned US Pesticides Creates a Deadly Circle of Poison

https://truthout.org/articles/export-of-banned-us-pesticides-creates-a-deadly-circle-of-poison/

BY Elisabeth McLaughlin,

PUBLISHED

May 28, 2019

An astonishing double standard exists in the United States. When the federal government bans a pesticide, proindustry loopholes allow agrochemical companies to recoup lost profits by manufacturing the same pesticide for use abroad. In 2013, data from the Environmental Protection Agency (EPA) showed that pesticides — banned, restricted or unregistered in the U.S. — were manufactured in 23 states for export to other countries.

With no comprehensive global regulatory framework to guide policy for transport, storage and use, the U.S. consciously subjects vulnerable agricultural workers overseas to chemicals known to cause harm and death, and widens international dependence of agriculture on pesticides. Every registered pesticide has a "tolerance" of how much residue can remain on a food product before it is deemed unsafe for human consumption. Pesticides deemed too dangerous or unregistered with the EPA cannot be sold in the U.S. Therefore, the same chemical should be deemed too dangerous to be used on foreign-grown food that will be eaten by Americans.

In 2015, the six largest pesticide producers controlled <u>75 percent of the pesticide market</u>; over the past three decades, collusion between government, regulators and powerful lobbyists have blocked all efforts to stem the

steady tide of chemical pesticide use. The EPA has no mandate to collect comprehensive data on pesticide exports and cannot access corporate export declarations. The most recent data are from nearly two decades ago. An <u>exhaustive study</u> found that from 2001 to 2003, the U.S. exported 28 million pounds of banned, severely restricted or unregistered pesticides to foreign countries — nearly 13 tons per day. Bottom of Form

While the U.S. is required to inform countries when a pesticide is not registered in the U.S., there is no assurance that the receiving official will forward the data to the user of the chemical. Agrochemical companies can satisfy labeling requirements simply by placing labels on shipping containers rather than on the product container.

The burden of regulatory precautions disproportionately falls on developing countries — such as Ecuador, Brazil, Indonesia and Malaysia — located mainly in South America and Southeast Asia. An overwhelming number of fatalities, some 99 percent, occur in countries in the Global South, where regulations are weaker. Vulnerable to both acute and chronic poisoning, agricultural workers are routinely exposed to toxic pesticides via spray, drift, or direct contact with treated crops and soil and from accidental spills. Chronic exposure has been linked to cancer, Alzheimer's and Parkinson's diseases, hormone disruption, sterility, suicide and numerous neurological health effects. Acute health problems range from skin disorders to death, and include respiratory, gastrointestinal, circulatory and neurological disease.

Given the reality of how these pesticides are actually used (without appropriate protective equipment, lack of proper disposal, etc.), halting exportation is critical. The World Health Organization estimated in 1990 that "up to 25 million workers in developing countries" suffer from pesticide poisoning every year. Since the sales volume of pesticides has increased, it is probable that the number of poisoning incidents is much higher. According to World Health Organization data published in 2008, unintentional ingestion, inhalation or contact with chemicals caused 346,000 deaths from acute poisonings in 2004. The global impact of self-poisoning from preventable pesticide ingestion was estimated to amount to 186,000 deaths.

A 2012 <u>study</u> by <u>Pesticide Action Network International</u> estimated that the number of people affected annually by short- and long-term pesticide exposure ranges between 1 million and 41 million.

<u>Eugenia Mejías</u>, a seasonal laborer in Chile, watched her 14-year-old daughter Evelyn die from severe congenital disabilities — hydrocephalus, misshapen and paralyzed legs, and a twisted, partially exposed spine. During her pregnancy, Mejías lived yards away from an apple orchard where planes regularly sprayed pesticides without taking precautionary measures to protect nearby workers and residents. This is just one story of many that illustrate the dangers of the pesticide cycle.

Damage to those in the global South is only part of the story. This disturbing practice creates a "circle of poison" where we are unknowingly consuming U.S.-banned chemicals in food produced in conditions dangerous to agricultural workers and their families. How can ethical responsibility for hazardous chemicals end at our borders?

The Food and Drug Administration's (FDA) efforts to protect U.S. consumers from potentially harmful pesticide residues in imported food is grossly inadequate. Despite widespread contamination of imported food, FDA inspectors rarely seize or refuse shipments. Only <u>2 percent of imported produce</u> is removed for analysis, while the rest of the shipment proceeds to the marketplace. By the time the test results are known, the food has already been consumed.

Imports have increased steadily for decades; more than half of the fresh fruit and almost a third of the fresh vegetables purchased in the U.S. are imported from other countries. Produce is laced with low levels of pesticide residues, and metabolites are now detected in produce, water and human tissue throughout the world. These non-degrading metabolites build up and persist in the body, and can be transferred to children in utero and through breastmilk, causing a number of detrimental health effects, such as hormonal disruption, infertility or cancer. Dramatic increases in chemical use in the last several decades parallel the increased incidence of chronic diseases associated with environmental contamination.

While agrochemical companies exaggerate food shortages if pesticides are not used for crop production, benefits are short-term and lead to further pest resistance and then greater loss of crop yields. Pesticide misuse contributes to the development of resistant strains of disease-carrying insects. Notably, resistance in malaria-carrying mosquitos has been an important contributor to the recent resurgence of the debilitating disease.

Not only should the export of banned pesticides be prohibited, but a precautionary approach should also be enacted. Based on Sweden's regulatory framework, the U.S. should enact a "<u>substitution principle</u>" that forbids the use of chemical products when a less-hazardous substitute is available. Under this scheme, if a new, safer pesticide is registered, the older one automatically loses its registration.

The development of a sensible pesticide export policy must recognize the importance of producing a worldwide supply of safe and affordable food that protects all citizens of Earth, at home and abroad. Lack of effective regulation detrimentally harms not only individuals and the environment where food is produced, but also individuals in the U.S. — the food processors and the consumers. No one is immune from this incessant circle of poison which must be broken.

The Technology Market: Revenue from the Sales of Biological Pesticide to Increase Exponentially During 2017 – 2025

https://thetechnologymarket.com/revenue-from-the-sales-of-biological-pesticide-to-increase-exponentially-during-2017-2025/38988/

May 28, 2019

4 Min Read

mangesh.k@futuremarketinsights.com

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Based on data by Persistence Market Research this report on 'Biological Pesticide Market' delivers a succinct analysis on industry size, regional growth and revenue forecasts for the upcoming years. The report further sheds light on significant challenges and latest growth strategies adopted by manufacturers who are a part of the competitive spectrum of this business domain.

Biopesticides or biological pesticides are used for controlling various insects and against pathogens that cause diseases. The various forms of biopesticides include bioinsecticides, biofungisides and bionematicides. The benefits derived from the usage of biopesticides in agriculture and in public health, programs are considerable. The global consumption of biopesticides over chemical pesticides is increasing due to its ecofriendly nature. As biopesticides are target-specific they are considered to be relatively safer to non-target organisms including humans. Registration of biopesticides is very easy hence; most of the countries have switched from chemical pesticides to biopesticides.

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The main application of biopesticides is against various plant diseases. These pesticides act very similarly to chemical pesticides except that chemical pesticides cause harm to the environment and leave back residues on the plants. These settled residues if ingested by people or animals may have hazardous effects on them. One of the highest growth areas for biopesticides involves their use in seed treatment and soil amendment. These biopesticides mainly find use on orchard crops, forage crops and field crops, which include corn and soybean. Conventional farmers usually employ biopesticides as resistant management tools. Organic farmers use biopesticides for pest and disease management while urban homeowners make use of biopesticides in order to reduce hazardous exposure to children and pests. Recently government agencies also use biopesticides for pest mitigation and eradication. The advantages of using biopesticides are that their harmful residues are not detected after their usage and they have no hazardous effects on the environment, they are inexpensive as compared to chemical fertilizers, they are much more effective when used on crops when compared to chemical pesticides. They are most widely accepted and utilized due to their biodegradable nature. Certain disadvantages, which may restrict the biopesticide market, include their slow speed action on crops. They do not show consistent efficiency, it varies according to the influence of biotic or abiotic factors. Once used on crops, if the insect is not eradicated or is not rendered incapable of reproduction, then the living population of that insect can acquire tolerance for the same biopestisides thus rendering its further usage futile.

The main drivers for the biopesticide market include the switch from other crops to organic crops, which requires the use of biopesticides. The global consumer demand for biopesticides is increasing continually. The chemical

pesticide market is declining continually due to the stringent regulations passed against its use due to the damage caused to the environment. These regulations occur specifically in Europe and America where the use of biopesticides as a substitute is widely accepted.

The key market segments include North America, Asia Pacific, Europe and Rest of the World (RoW). The demand for chemical free crops and organic farming in North America and western Europe increases the usage of biopesticides in those countries as there are stringent regulations against the use of chemical pesticides especially in these countries the EU and the FDA. The consumption of biopesticides is the highest in Europe and is expected to increase by a small margin in the next few years. Advancements in biopesticide technology are likely to increase its demand in the U.S. in the near future. At present the biopesticide is anticipated to increase in Latin American countries and Asia Pacific countries. The biopesticide use in India is expected to increase, however Indian farmers have to be made aware about the usage of these products in order to maximize their gains.

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The main companies profiled for the manufacture of biopesticides include BASF SE, Henkel AG, Du Pont (EI) de Nemours, Dow Chemicals, Bayers AG among others.

Midwest Center for Investigative Reporting: Glyphosate use increases dramatically across the Midwest https://newfoodeconomy.org/glyphosate-roundup-bayer-monsanto-reliance-increase-midwest-pesticide-resistance/

Darrell Hoemann/The Midwest Center for Investigative Reporting

New data analysis shows that lawsuits and decreasing effectiveness don't seem to be slowing usage of this controversial pesticide.

May 28th, 2019

by Christopher Walliasper Ramiro Ferrando

ACCESS ENVIRONMENT FARM HEALTHHOME FEATURE ISSUES SYSTEMS

Farmers have been using the weed killer glyphosate—a key ingredient of the product Roundup—at soaring levels, even as the chemical has become increasingly less effective and as health concerns and lawsuits mount.

Nationwide, the use of glyphosate on crops increased from 13.9 million pounds in 1992 to 287 million pounds in 2016, according to estimates by the U.S. Geological Survey.

This story was republished from the Midwest Center for Investigative Reporting. Read the original story here.

A review of the agency's data by the Midwest Center for Investigative Reporting shows that farmers across the Midwest used an estimated 188.7 million pounds of glyphosate in 2016—nearly 40 times more than in 1992 when they used a total of 4.6 million pounds. The data for the year 2016 is the latest available.

Farmers in those 12 states—including Illinois, Indiana, Iowa and Nebraska—grow most of the country's soybean and corn crops. Glyphosate is now the primary way farmers manage weeds that would otherwise reduce the amount of grain they can produce. The Midwest accounts for 65 percent of the nation's use of glyphosate for crops, according to the Center's analysis.

The estimates are from data collected through surveys of farms and may be high in some cases. However, the estimates provide an overview over decades on how dramatically glyphosate use has increased.

As a caution, the Midwest Center reviewed data with low estimates of pesticide use on crops and crop fields, to avoid overestimation. And not all crops can be sprayed with glyphosate. Therefore, the rate applies only to crops engineered to survive the pesticide.

"We're way over-reliant on Roundup. Nobody thought we were going to be dealing with the problems we are dealing with today."

Pesticide is the broad term for substances that can kill bugs, weeds and other pests. Specifically, herbicides kill weeds and insecticides kill bugs.

Roundup was manufactured by agriculture company Monsanto until it was bought by German pharmaceutical company Bayer in 2018.

Once thought of as a miracle product, over-reliance on glyphosate has caused weeds to grow resistant to the chemical and led to diminished research and development for new weed management solutions, according to Bill Curran, president-elect of the Weed Science Society of America and emeritus professor of weed science at Penn State University.

"We're way over-reliant on Roundup," Curran said. "Nobody thought we were going to be dealing with the problems we are dealing with today."

Meanwhile, juries have recently awarded at least \$2.2 billion in damages to plaintiffs in three separate cases who claimed that glyphosate caused the cancer, non-Hodgkin lymphoma.

Glyphosate is at the center of thousands of more similar lawsuits against Bayer. As the company faces the fourth lawsuit over Roundup this August in St. Louis County Circuit Court, the company is also receiving backlash from investors and the public. Bayer's stock price has dropped more than 40 percent since it bought Monsanto.

The Midwest Center for Investigative Reporting

Map of glyphosate use by state in 2016.

The EPA, during a routine review of its glyphosate registration, said earlier this year glyphosate does not cause cancer, but the International Agency for Research on Cancer in 2015 classified glyphosate as "probably carcinogenic to humans."

The <u>U.S. Food and Drug Administration has reported trace amounts</u> of glyphosate in food samples after testing for the first time in 2016, though levels remained below acceptable thresholds. The Centers for Disease Control and Prevention has called for more research on the chemical's effects on humans.

Resistance to glyphosate grows

Despite warning that overuse could lead to weed resistance, manufacturers of glyphosate have continued selling the product to farmers at increasing rates.

James Benham has been farming in Southeast Indiana for nearly 50 years. Benham said, as resistance grew, Roundup went from a cure-all to a crutch.

"Sometimes if you timed it just right, you could get away with just one spraying. Now we're spraying as often as three or four times a year," he said.

Christopher Walljasper/The Midwest Center for Investigative Reporting

After farming tobacco, corn and soybeans for more than 50 years, James Benham is planting hemp on his farm near Versailles, Indiana.

Benham said farmers continue to spend more on seed and chemicals but aren't seeing more profit. "That puts the farmer in that much more of a crisis mode. Can't do without it, can't hardly live with it," he said.

As glyphosate became less effective, farmers also turned to even more pesticides to try and grow successful crops each year.

Glyphosate was first introduced by Monsanto in 1974. But it wasn't until the 1990s—when the company released genetically modified corn, soybean, and cotton seeds that could withstand the weed killer—that the use of glyphosate saw a dramatic increase, said Sarah Ward, associate professor of plant genetics at Colorado State University.

"I think it did become too much of a good thing. I think growers locked on to the simplicity, and the effectiveness of using glyphosate as your primary, or in many cases your only means of weed control," Ward said.

When the patent for glyphosate expired in 2000, it opened the door for generic production, and usage increased even more.

By 2007, the <u>University of Nebraska's Institute of Agriculture and Natural Resources</u> noted at least 40 generic glyphosate-based herbicides, including offerings by DowDupont (now Corteva Agriscience) and Syngenta.

Charla Lord, spokeswoman for Bayer, said in an email statement that glyphosate is safe and still effective for farm and residential use.

"Can't do without it, can't hardly live with it."

"Glyphosate-based herbicides are supported by one of the most extensive worldwide human health and environmental effects databases ever compiled for a pesticide product. Glyphosate's ability to effectively control unwanted vegetation provides benefits that extend from individual farms to global trade to national parks to golf courses to local governments to gardeners," Lord said.

But as glyphosate use shows little sign of slowing, some experts fear what it means for farmers and consumers.

In 2017, Monsanto reported net sales of \$3.7 billion in its agricultural productivity division, which includes glyphosate, up \$213 million from 2016, according to its annual report.

Market researchers predict the glyphosate market to grow to \$8.5 billion to \$10 billion annually by 2021 up from \$5 billion now.

"The increase in agricultural productivity reflects increased volume of Roundup and other glyphosate-based herbicides globally," Monsanto said in the report.

Market researchers predict sales of glyphosate will be between \$8.5 billion and \$10 billion by 2021.

Game changer

Before glyphosate was available, farmers used a variety of other pesticides to combat specific weeds.

Jack Boyer, a farmer who plants around 800 acres of corn, soybeans, and cereal rye in northeast Iowa, said before Roundup, he would apply a mixture of pesticides to the soil before planting, or spray it on patches of weeds after the crop emerged from the ground.

Darrell Hoemann/The Midwest Center for Investigative Reporting

Seed test plot at a Pioneer research facility near Champaign, Illinois. Pioneer is a subsidiary of DowDupont.

"It was quite a labor-intensive process, as well as [using] more chemicals," Boyer said. "When Roundup, or glyphosate came along, it made things a whole lot simpler and really cleaned up the area, for a long time."

Even after applying pesticides, farmers or farm workers would walk the fields, chopping weeds by hand. "As a young teenager, I spent a good chunk of my summer with a hoe in hand, chopping those weeds out," said Mary Boote, chief executive officer of Global Farmers Network, a non-profit group based in Des Moines, Iowa, that advocates for farmers around the world.

In the late 1990s, when glyphosate was combined with genetically modified seeds that could withstand the herbicide, it was a scientific breakthrough in crop biotechnology, according to Boote. She said glyphosate did more than just help farmers grow better crops.

"The advent of glyphosate was a game-changer. Not only did it effectively kill the weeds that were threatening and taking away maximum crop production, there was a quality-of-life issue," Boote said.

The combination of planting glyphosate-resistant seeds, then applying the chemical over the top of the crop, allowed farmers to apply a fewer number of chemicals. This led to the rise of no-till farming, which prevented soil erosion.

Alan Kadolph, a farmer in Hardin County, Iowa, said some of his peers moved away from other weed management practices (like cultivation or hand-chopping) altogether.

The over-reliance on glyphosate accelerated the growth of weed resistance.

"It all went back to cost-effectiveness. Roundup was such a cheap product per acre," Kadolph said.

Victims of success

Dane Bowers, technical product lead for herbicides at Syngenta, said glyphosate worked so well in the late 1990s and early 2000s, people didn't believe that weeds could develop a resistance to it.

"We're kind of a victim of our own success here," Bowers said. "It is such an effective herbicide, it was really difficult to convince people to reduce their reliance on it. It made weed control so simple, effective and affordable."

But with that dramatic shift to glyphosate came a drastic increase in use as well, especially in the Midwest. Farmers were applying it multiple times a year to keep weeds at bay. Kadolph said some farmers got used to how versatile glyphosate could be.

"It was so easy. You didn't have to worry about what stage the weeds were (at) out in your field. You just changed your rate of Roundup. 'I'm not going to spray this week, I'll spray next week," he said.

Aaron Hager, a weed scientist at the University of Illinois, said the over-reliance on glyphosate accelerated the growth of weed resistance.

"The sad reality is that, weed management on conventional, biotech-dependent corn, soybean, and cotton farms is out of control."

"In any biological system, when you make such a dramatic shift to a very limited number of options to control a pest, that system is very likely going to evolve," Hager said.

Bayer's Lord said weed resistance is not a new problem for farmers. "Farmers have been dealing with this issue of herbicide resistant weeds since the 1950s, and it is a reality that growers know how to manage," she said in an email.

But Ward said this resistance is different because of how widespread glyphosate use has become. "Growers locked on to the simplicity, and the effectiveness of using glyphosate as your primary, or in many cases your only means of weed control," she said.

Charles Benbrook, an agricultural economist who has published several studies on glyphosate, and testified as an expert witness on behalf of plaintiffs, said the overuse of glyphosate has presented farmers with real financial challenges.

"The sad reality is that, weed management on conventional, biotech-dependent corn, soybean, and cotton farms is out of control," he said. "It's created a serious economic problem for farmers, because they're spending far more for seed and weed control."

Darrell Hoemann/The Midwest Center for Investigative Reporting

Soybean harvest underway near Monticello, IL

In 2017, farmers spent \$17.6 billion on chemicals, according to the USDA's 2017 Census of Agriculture.

That more than doubled in 20 years. During the same time, farmers spent \$21 billion on seed, up from \$6 billion in 1997, when genetically modified seeds were just hitting the market.

The adoption of genetically modified seeds was rapid. For example, genetically engineered corn made up 17 percent of all corn planted in 2000; by 2016, 92 percent of all corn planted was genetically engineered, according to USDA data.

"It's just a whole different ballgame, because of how powerful, and how successful glyphosate has become," Curran said.

This story was republished from the Midwest Center for Investigative Reporting, a nonprofit, online newsroom offering investigative and enterprise coverage of agribusiness, Big Ag, and related issues through data analysis, visualizations, in-depth reports, and interactive web tools. Visit its website here.

Christopher Walljasper

Christopher Walljasper is an investigative reporter and audio producer based in Chicago.

Ramiro Ferrando

Ramiro Ferrando is a journalism master's student at the University of Illinois at Urbana-Champaign.

Articles

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MedicalXPress: French watchdog bans sale of common pesticide

https://medicalxpress.com/news/2019-05-french-watchdog-sale-common-pesticide.html

The debate over the use of pesticides is highly sensitive, needing to balance concern for human health over the needs of the agricultural sector

The French food safety agency ANSES on Tuesday barred the sale of epoxiconazole, a widely-used pesticide, citing a "worrying danger" to humans.

The fungicide, mainly produced by the German chemical giant BASF, is used for about half of France's <u>cereal crops</u> and 70 percent of beetroot cultivation, ANSES said.

The agency says the substance, already a suspected carcinogen, is thought to be "toxic" to <u>human reproduction</u>.

ANSES took up the question after the European Union adopted <u>new regulations</u> in late 2017 concerning endocrine disruptors.

"A guide published in June 2018 at the European level set scientific criteria to say whether an active substance is an endocrine disruptor," ANSES managing director Caroline Semaille told AFP.

"On the basis of the new guide, we can establish and confirm that (epoxiconazole) is an endocrine disruptor."

The pesticide, of which 200 tonnes is sold in France each year under dozens of brand names, presents "a worrying danger for man and the environment", the agency said in a statement.

According to the World Health Organization, an <u>endocrine disruptor</u> is a substance, or mixture of substances, which disrupts hormonal system functions and consequently is harmful to human health and reproduction, including at very weak levels of exposure.

People are exposed to hormone-disrupting chemicals through everyday products including food and drink, medications, pesticides, cosmetics, plastics, detergents, flame retardants, and toys.

The suspect compounds have been linked to altered reproductive function in males and females, increased incidence of breast cancer, disturbance of the nervous and immune systems, abnormal growth, and stunted development in children.

The EU rules finally adopted in 2017 did not satisfy activists and cover only chemical agricultural inputs and biocides.

ANSES singled out epoxiconazole because of its widespread use but will subject other substances to the EU guidelines, Semaille said.

The agency will relay its decision to Brussels, which is to decide whether to renew authorisation for use of the pesticide by April 2020.

The products must be removed from sale in France within 12 months, Semaille said.

She noted that "alternatives in the same family (of substances) such as triazoles" exist, and that "new <u>substances</u> are being evaluated at the European level."

The debate over the use of pesticides is highly sensitive, needing to balance concern for human health over the needs of the agricultural sector.

Controversy over the herbicide glyphosate has taken the spotlight in recent years, but the government has set a wider goal of reducing the use of chemical agricultural inputs by 25 percent by 2020 and halving them by 2025.

Independent (Dublin, Ireland): Appeal to farmers after pesticide detected in drinking water in Mayo https://www.independent.ie/business/farming/forestry-enviro/environment/appeal-to-farmers-after-pesticide-detected-in-drinking-water-in-mayo-38156834.html

Users urged to be responsible when spraying pesticides

Ciaran Moran

May 28 2019 3:03 PM

An exceedance for the pesticide glyphosate has been detected in the public drinking water supply in Newport, Co. Mayo.

Glyphosate is a broad spectrum herbicide used mainly for the control of annual broadleaf weeds and grasses and is found in a number of weed killer formulations used by gardeners and farmers.

It has hit the headlines recently following a host of high-profile court cases. Recently a Californian jury awarded more than \$2bn (€1.8bn) to a couple who claimed Bayer AG's glyphosate-based Roundup weedkiller caused their cancer.

However, Bayer AG which owns the product is confident its appeals of recent court rulings that its glyphosate weed killer Roundup caused cancer will be successful.

Dr Pat O'Sullivan, Regional Drinking Water Compliance Specialist with Irish Water said in Co Mayo, the exceedance of the drinking water regulations for Glyphosate was noted in the Newport supply in May.

"While the HSE has advised that the levels seen do not represent a threat to public health, it is, however, undesirable and it is therefore imperative that users of pesticides are mindful of best practice when spraying their lands.

"Irish Water is continuing its extensive investment programme to improve water and wastewater services in Ireland. Providing safe, clean drinking water for all is our first priority," he said.

He said Irish Water is working in partnership with the National Pesticides and Drinking Water Action Group (NPDWAG), is appealing to farmers, sporting organisations and other users of pesticides to carefully follow the guidelines when applying these chemicals to their lands.

Also Read

"A single drop of pesticide can breach the drinking water limit in a small stream for up to 30 kilometres.

"This clearly highlights the potential risks facing many of Ireland's drinking water sources," Irish Water has said.

Certain pesticides being detected more frequently

Recent Drinking water monitoring results for Ireland show that a number of pesticides commonly used such as Bentazone, MCPP, MCPA, Clopyralid and Fluroxypyr, are being detected more frequently.

"We are working in partnership with the National Pesticides and Drinking Water Action Group and would like to remind farmers and professional users of pesticides to follow best practice in the application of pesticides on land, particularly near lakes and rivers used as drinking water sources," Irish Water said in a statement.

WBUR - On Point - Save The Bees: EPA Bans 12 Pesticides Harmful To Honeybees

https://www.wbur.org/onpoint/2019/05/28/honeybees-pesticides-epa 47:07

May 28, 2019

With Meghna Chakrabarti

The EPA is pulling a dozen products containing chemicals harmful to honeybees. It's the end of a long legal battle, but not the end of the threat to bees.

Guests

Adam Allington, chemicals and pesticides reporter for Bloomberg Environment. Host of Bloomberg Environment's "Business of Bees" podcast. (@aallington)

Aimee Code, pesticide program director at the the Xerces Society for Invertebrate Conservation. (@xercessociety)

Carson Klosterman, corn and soybean farmer who uses neonics. Former president of the North Dakota Corngrowers Association. (@NDStripTillCorn)

From The Reading List

Bloomberg Environment: "EPA Curbs Use of 12 Bee-Harming Pesticides" — "The Environmental Protection Agency has canceled registration of a dozen pesticides, from a class of chemicals known to harm bees.

"The cancellations are effective as of May 20 for 12 neonicotinoid-based products produced by Syngenta, Valent, and Bayer.

Get highlights, extras and notes from the hosts sent to your inbox each week with On Point's newsletter. Subscribe here,

"The Federal Insecticide, Fungicide, and Rodenticide Act requires pesticides sold or distributed in the U.S. to be registered by the EPA.

"Under a December settlement agreement linked to an Endangered Species Act challenge by environmental groups, the companies voluntarily agreed to petition EPA to cancel 12 out of 59 products containing the active ingredients clothianidin and thiamethoxam.

"Developed as an alternative to organophosphate and carbamate pesticides, neonicotinoids are chemically related to nicotine, and attack the nervous system of insects."

Washington Post: "The Energy 202: EPA blocks a dozen products containing pesticides thought harmful to bees" — "The Environmental Protection Agency is pulling from the market a dozen products containing pesticides known to be toxic to a linchpin of the U.S. food system — the honeybee.

"The agency announced Monday it has canceled the registrations of 12 pest-killing products with compounds belonging to a class of chemicals known as neonicotinoids, as part of a legal settlement.

"For years, beekeepers and wildlife conversationalists alike have voiced concern that the widespread use of neonics, as the chemicals are commonly called, is imperiling wild and domesticated bees crucial to pollinating commercial fruit, nut and vegetable crops."

PBS NewsHour: "Neonicotinoid pesticides are slowly killing bees" — "Neonicotinoid pesticides commonly found in agricultural areas kill bees and hurt their ability to reproduce, two separate large-scale studies confirmed for the first time Thursday.

"The two studies — one that examined honeybees in Canada and the other that looked at three bee species in the United Kingdom, Germany and Hungary — were the first large-scale investigations to test the popular agrochemicals influence on bees in real world settings.

"The work also turns many preconceived notions about bees and pesticides on their heads."

Grace Tatter produced this hour for broadcast.

PublicSource: Report details PFAS contamination near Pittsburgh airport that 'likely' extends beyond military base boundaries

https://www.publicsource.org/report-details-pfas-contamination-near-pittsburgh-airport-that-extends-beyond-military-base-boundaries/

Oliver Morrison | 9 hours ago

SHARETWEET EMAIL

A new report shows PFAS chemical contamination at two military bases near the Pittsburgh Airport. The report also contains concern about the source water for Moon Township. (Photo by Ryan Loew/PublicSource)

Editor's note: This story is part of an ongoing collaboration between PublicSource and <u>Environmental Health News</u> on PFAS contamination in Pennsylvania and was funded in part through the <u>Bridge Pittsburgh Media Partnership.</u>

Sarah Chromack has lived in her house just south of the Pittsburgh International Airport since the 1960s.

She's been drinking water out of a private well in her basement the entire time.

According to a recent report from the U.S. National Guard, toxic firefighting foam has, over time, contaminated the surface and groundwater at two military bases at the southeast end of the airport, fewer than 1.5 miles from Chromack's home.

The foam contains several chemicals referred to as per- and polyfluoroalkyl substances [PFAS], which have been linked to low birthweight, thyroid problems, immune system disruptions and cancer.

The Pennsylvania Department of Environmental Protection [DEP] has begun testing hundreds of public drinking water systems in the state to see how far PFAS contamination extends, but the DEP isn't saying where exactly it is conducting the tests.

A stream across the street from Sarah Chromack's home starts 2 miles up the road, right next to a firefighting training facility at the Pittsburgh airport. Scientists think it's likely that there is PFAS contamination nearby. (Photo by Oliver Morrison/PublicSource)

It's not clear if Chromack's water has been impacted, and the DEP has no current plans to test private wells like hers. Since the Guard report was released in October without fanfare, no one has informed Chromack or nearby residents of its findings.

Chromack, 78, doesn't know anything about PFAS chemicals and their potential health dangers.

But she is afraid she will have to start paying for public water if her well turns out to be contaminated. When Findlay Township previously offered to connect her home to the city's water supply, she said she couldn't afford it: Her husband passed away from brain cancer 30 years ago, and she is living on a single income.

A new financial burden could be the difference between staying in her own home or not.

"I just can't afford it," she said. "I don't get much money on Social Security."

The report

The National Guard report details widespread contamination detected between December 2017 and February 2018 at two area military bases: the Pittsburgh Air National Guard Base and the Pittsburgh Air Reserve Station.

The Pittsburgh bases were added to the state's list of contamination sites in November after the National Guard report was released. But there was no press release making the report's existence known and the report has not previously been covered in the media.

The National Guard tested 31 sites across the two Pittsburgh-area military bases and found PFAS chemicals contaminating the groundwater and/or surface water above the federal threshold at 24 sites. (Source: Air National Guard)

There are 21 other confirmed PFAS contamination sites across the state. The Pittsburgh Air National Guard Base and the Pittsburgh Air Reserve Station are the first two documented cases of PFAS contamination in Western Pennsylvania.

The report shows:

- The surface water and/or groundwater at 24 of 31 sites sampled on the bases was contaminated with PFAS chemicals at levels above the threshold for safe drinking water set by the U.S. Environmental Protection Agency [EPA]. In one spot, the sample was 87 times higher than the EPA's threshold.
- The soil was contaminated but not at a level that exceeded a threshold for soil safety set by the Air Force. But the report warned that soil contamination can wash into groundwater.
- The contamination has "likely" spread off base. Further testing is recommended to determine how far the contamination has traveled.
- At leave five private water wells, located within 1 mile of the base, are at risk. The DEP recommended that the Department of Defense test them.
- Concern over the water source used by the Moon Township Municipal Authority [MTMA] is present in the report and by scientists who study PFAS. The authority serves drinking water to 38,000 residents and to the Pittsburgh International Airport, which saw an estimated 10 million passengers pass through last year.

The MTMA tested its water in December in response to a <u>PublicSource article</u> about PFAS chemicals. The test showed the contamination is low enough to safely drink the water. The test found three kinds of PFAS chemicals at a total concentration of 12.7 parts per trillion [ppt], well below the EPA's health advisory threshold of 70 ppt. The test was performed on drinking water that had already been treated for PFAS chemicals.

Shawn Monk, the public affairs superintendent at the National Guard Base, referred questions to the military's national communications team, which did not return requests for comment.

Mark Kinkade, a spokesperson for the Air Force, would not answer specific questions but said, "We are working closely with state regulators to address drinking water contamination concerns."

The amount of contamination detailed in the report is in line with contamination detected at military bases across the country. The U.S. military has <u>spent more than \$350 million</u> identifying the extent of PFAS contamination and cleaning up military bases as of April 2019. It is expected to cost \$2 billion to clean it up, <u>according to the Department of Defense</u>.

Related: How spills of toxic firefighting foamcontaining PFAS escaped into streams, drains near Pittsburgh airport

In 1999, a heat detector malfunctioned, causing toxic firefighting foam to spill into a stream near the Pittsburgh Air Reserve Station. (Photo by Ryan Loew/PublicSource)

In September, Gov. Tom Wolf formed a PFAS task force to deal with the toxins.

The DEP is testing 316 of 493 public water sources identified as having the highest risk. The state has \$250,000 for testing.

The DEP considered the proximity of water sources to several potential sites of PFAS contamination in Allegheny County, including four airports, six fire training facilities, 15 military sites, more than 20 landfills and dozens of current or former industrial sites that could be sources of contamination.

But the DEP is not saying which public water systems are being tested. Representatives at the MTMA in Moon say they have not been contacted by the state about participating in the state's testing program.

DEP spokesperson Elizabeth Rementer said the sample testing plan "is not meant to be a definitive survey of all public water systems in Pennsylvania, but a representative sample to determine the prevalence of PFAS chemicals."

Michigan has required testing at nearly 1,000 drinking water sources and found the drinking water of more than a million residents has been contaminated to varying degrees.

Drinking water

John Riley, the general manager of the MTMA, worries that the public is going to get unnecessarily worried about the safety of the drinking water.

Riley doesn't think the new report showing contamination at the two military bases is a cause for much concern. Riley said the bases are 10 miles downriver from the authority's source for drinking water. The report, though, points out that the MTMA's source water is only about 4 miles away from the bases by groundwater.

The bases have been contaminated for many years, Riley said, meaning any contamination likely would have already shown up in testing.

In 2013, a faulty switch at the Pittsburgh Air National Guard Base led to more than 400 gallons of toxic firefighting foam releasing into a nearby stream. That stream feeds into Montour Run, where trout fishing is common. (Photo by Ryan Loew/PublicSource)

"This is a very old source, and it's far away from our supply and any influence from it would be tremendously diluted by the Ohio River," he said.

The authority tested its drinking water after it applied carbon filtration, which removes PFAS chemicals, but has not tested the source of its drinking water directly for PFAS contamination, according to Riley. The authority installed a second kind of carbon filtration in 2003 to remove other kinds of organic contamination but that filtration also removes PFAS chemicals.

The contamination has "likely" spread off base, according to the report.

It's not yet clear how much PFAS contamination may be in the MTMA's source water before carbon filtration.

"We were never asked to test the raw/untreated water for PFAS chemicals," Riley wrote in an email.

The biggest source of exposure to PFAS contamination is typically through drinking water sources, said Dave Andrews, a scientist who studies PFAS for the nonprofit Environmental Working Group.

Christopher Higgins, a civil and environmental engineer at the Colorado School of Mines who studies PFAS contamination, said he thinks the authority should test its untreated water. Carbon filtration systems have to be maintained correctly to prevent PFAS contamination.

Moon doesn't regularly test for PFAS. The Pittsburgh Water and Sewer Authority, by contrast, says it tests its drinking water twice a year for PFAS chemicals. Its tests have not shown contamination that exceeds the EPA's health advisory limit.

"We may do testing again," Riley said, "just to make sure that our customers can be confident in the quality of the water that is provided to them."

According to Higgins, one of the great risks of PFAS chemicals is that they don't become any safer over time. That's why they are sometimes referred to as "forever chemicals."

"If there is a plume headed in their direction, for all I know, it could 'arrive' next year, 50 years from now or never..." he said. "The issue is that the chemicals will still very likely be in the groundwater 100 years from now unless someone cleans them up."

Threat to nearby streams and fish

While it isn't clear how far off base the PFAS contamination has spread, Higgins said the chemicals often follow the path where water travels.

"So what that means is that if there is any contaminated groundwater discharged to a stream, which there often are, the streams could be contaminated," he said.

The contamination report noted several instances since the 1990s when toxic firefighting foam was reported to be floating on top of nearby streams after major spills. State agencies reported at the time that they didn't notice dead fish from the spills.

"...if there is any contaminated groundwater discharged to a stream, which there often are, the streams could be contaminated."

But Higgins said the problem with PFAS chemicals isn't that they kill fish, but that they contaminate fish tissue. People who eat those fish could be ingesting harmful levels of the toxins.

Two of the streams that received toxic firefighting foam during spills feed into Montour Run. Trout are routinely stocked and fished in Montour Run, according to local officials.

The DEP in Pennsylvania hasn't tested Montour Run or its tributaries for contamination "because this is a relatively new issue in the area and until recently our lab could not analyze for PFAS," according to Rementer of the DEP.

Michigan, Minnesota and New Jersey have all set advisory limits for how many fish of particular species and sizes people should eat from water with substantial PFAS contamination.

McClarens Run and Montour Run, two streams mentioned in the report, are already contaminated with various pollutants, said Sean Brady, the executive director of Hollow Oak Land Trust. Montour Run contains fish large enough that PFAS chemicals could bioaccumulate in the tissue of the fish, he said.

"It would be nice to know that the DEP is going to respond to that to do [PFAS] testing to protect people and wildlife alike from potential contamination," Brady said.

More potential contamination

The Allegheny County Airport Authority has a fire training facility closer than 1.5 miles northwest of Chromack's home. Scientists who study PFAS say the facility could be another source of contamination.

Bob Kerlik, the vice president of media relations, wrote in an email that the authority now uses a safe firefighting foam and implements procedures that minimize the chances the foam could contaminate the surrounding environment.

PFAS contamination can occur in places where firefighting foam containing the chemicals was used. (Photo by Oliver Morrison/PublicSource)

Kerlik didn't answer questions about whether and to what extent the airport used toxic firefighting foam in the past. The authority is aware of the PFAS contamination at fire training facilities nationally, Kerlik wrote, but it hasn't tested for it.

Higgins said he would almost be willing to bet his house that testing would show contamination.

"If they have their own fire training facility," he said, "it's almost a guarantee they have their own [contamination] plume emanating from that facility."

Oliver Morrison is PublicSource's environment and health reporter. He can be reached at <u>oliver@publicsource.org</u> or on Twitter <u>@ORMorrison</u>.

This story was fact-checked by Harinee Suthakar.

Michigan Live: In quest to destroy PFAS, MSU diamond tech shows promise

https://www.mlive.com/news/2019/05/in-quest-to-destroy-pfas-msu-diamond-tech-shows-promise.html

Updated 9:29 AM; Today 9:28 AM

By Garret Ellison | gellison@mlive.com

EAST LANSING, MI — Wouldn't it be nice to destroy fluorochemical pollutants rather than quarantining or incinerating them?

Cory Rusinek and his team at the Fraunhofer USA laboratory at Michigan State University think so and the city of Grand Rapids does, too.

In March, the city commission approved a \$300,000 investment into Rusinek's method for breaking apart the high-strength chemical bonds which have earned per- and polyfluoroalkyl substances, or PFAS, the nickname "forever chemicals."

Eventually, the city hopes to deploy the technology at its wastewater plant, where PFAS from industrial discharges and landfill leachate are passing unimpeded through treatment into biosolid sludge and treated effluent that's discharged to the Grand River.

"The potential is there to actually solve this problem," said Nicole Pasch, acting assistant environmental services manager in Grand Rapids. "It's not an immediate solution and it'll be a long term program. But at least the potential is there."

Rusinek, a 30-year-old electrochemist, has developed a way to break down the carbon-fluorine bonds that allow PFAS compounds to withstand heat and repel water, grease and oil. Those properties, while valuable in the marketplace, are harmful in the environment and living organisms because the chemicals don't naturally degrade.

The chemical bonds are strong enough to resist most conventional forms of drinking water and wastewater treatment.

Rusinek's team uses boron-doped diamond electrodes to pummel PFAS molecules with a high-strength electric current, a process called electrochemical oxidation. The end result is a harmless mixture of carbon dioxide, water and fluoride.

The process works, but right now it's limited by energy usage.

"The more current you apply, the faster you degrade," said Rusinek. "But you also consume more energy. That's the trade-off."

Nonetheless, the promise is real and there's a growing appetite for technologies that actually destroy PFAS molecules.

Most PFAS treatments rely on absorption. Systems like granular or powdered activated carbon (GAC or PAC), or reverse osmosis, remove the chemicals from water supplies but produce a concentrated byproduct that must be dealt with.

That byproduct is generally either incinerated — which may disperse the chemicals into the air — or sent to a landfill.

In a landfill, the compounds inevitably make their way into the leachate. Leachate is usually trucked to a wastewater plant for treatment. One there, the compounds re-enter the environment because most wastewater plants haven't installed specialized absorbent filtration that would capture PFAS due to the expense.

Regulators call this the "PFAS cycle" and they'd like to break it.

"Right now, we're essentially cycling PFAS through the ecosystem because we're not breaking it down," said Steve Sliver, director of MPART, the Michigan PFAS response team housed within the state Department of Environment, Great Lakes and Energy (EGLE).

Wastewater plant sludges are often either landfilled themselves, or spread on farm fields as a soil amendment. If contaminated, they can further spread PFAS by polluting soil and groundwater.

Wastewater effluent is usually discharged a river or another surface water body, where, if contaminated, it can poison the fish people eat or the water they drink.

This is happening across Michigan. In Ann Arbor, much of the city's water comes from the Huron River, which is contaminated by PFAS passing through the Wixom wastewater plant upstream. The city has begun using activated carbon to filter the compounds.

In Lapeer, PFAS moved through the wastewater treatment plant to the Flint River, where state officials found it downstream in fish. Their search for a cause led them to an chrome plating manufacturer and prompted nearly two years of efforts by the city, state and business to reduce contamination amounts to acceptable levels.

Among other health problems, exposure to PFAS is linked to some urogenital cancers, thyroid disorders and neurodevelopment problems.

Sliver sees potential for destructive technologies to be part of a "treatment train." Because of energy use limitations, Rusinek's process cannot treat mass quantities of wastewater in a municipal plant. However, it could treat the smaller volume, filtered byproduct produced by treatments like activated carbon or reverse osmosis.

Or, it could become a primary treatment for landfill leachate, which is generally smaller volumes than industrial or municipal wastewater.

"It's a puzzle," said Rusinek. "There will have to be many pieces."

The team at MSU hopes the Grand Rapids investment convinces other municipalities and private industries to help fund the research. Reputation in the science world may help. Rusinek's team is located at MSU, but their paychecks come from the Fraunhofer Society, which operates applied science research institutes in Germany and the U.S.

Well-known innovations developed by Fraunhofer researchers include the MP3 audio compression file and multicarrier modulation technology that enabled satellite radio.

The MSU lab, which is one of the largest research efforts on campus, is working on other PFAS remediation technologies as well. Other Fraunhofer researchers at MSU are working on plasma-based treatment and absorption method using some state funding.

Pasch said the investment was not a tough sell with city leaders.

"We're looking for that longer term-solution to solve PFAS and we believe breaking that chain of biosolids to landfills and leachate to wastewater is a good starting point."

The Hill: Lawmakers, Trump agencies set for clash over chemicals in water

https://thehill.com/policy/energy-environment/445514-lawmakers-trump-agencies-set-for-clash-over-chemicals-in-water

BY REBECCA BEITSCH - 05/27/19 04:32 PM EDT 229

An aggressive push by Congress to pass bipartisan legislation addressing cancer-causing chemicals that are leaching into the water supply is setting the stage for a fight with the Trump administration.

The chemicals, commonly abbreviated as PFAS, are used in items ranging from food wrappers and Teflon pans to raincoats and firefighting foam. But studies have found that as they break down and find their way into drinking water, they can cause a variety of negative health effects.

PFAS has been linked with kidney and thyroid cancer along with high cholesterol and other illnesses. Contamination has spread to 43 states, and a 2015 study <u>found 98 percent of Americans tested</u> now have the chemical in their blood.

But the bipartisan push to tackle the problem is setting up a clash with agencies, in particular the Environmental Protection Agency (EPA) and Pentagon, that have been resistant to regulating the chemicals.

Members of Congress have introduced at least 20 bills this session to address PFAS in some form, a record number and a sign of the growing concern.

"It has the most bills because we are now fully aware of the risks and how extensive the contamination is," said Sen. <u>Debbie Stabenow</u> (D-Mich.), whose home state is believed to have the most severe PFAS contamination in the U.S. thanks to Michigan's long manufacturing history and PFAS's use on military sites.

PFAS appears in a staggering number of products, and that production, along with heavy use of firefighting foam by the military and at airports, are the main sources for the contamination.

Stabenow has sponsored two bills on the topic this year. The broad package of bills in both chambers include measures that would require EPA to set a drinking water standard for PFAS, set deadlines for cleaning up PFAS contamination caused by the federal government, allow the use of Superfund cleanup funds to deal with PFAS contamination, establish a ban on new PFAS chemicals, and provide funding to clean up already-contaminated water. Senators have added some similar measures to this year's defense spending bill.

Committee chairpeople in both chambers dealing with PFAS legislation have called the bills a priority.

But there remain some tough sticking points, such as whether to address all 4,700 varieties of PFAS or just the handful that have been rigorously studied. Lawmakers, particularly Republicans, are concerned Congress may overstep its authority by jumping ahead of the EPA's own scientific review. And there's also disagreement over how to hold companies and even the government liable for cleaning up contamination.

Senate Environment and Public Works Committee Chairman John Barrasso (R-Wyo.) said he's concerned about imposing liability on companies that used products containing PFAS for decades in good faith.

"Our nation's airports, refineries, and others used fire-fighting foam containing PFAS in order to protect their workers and the public at large," Barrasso said this week before reviewing several bills. "All these entities were either following regulations or the industry's best practices."

The chemicals industry wants the government to tackle each PFAS chemical individually.

Kimberly Wise White, senior director of chemical products and technology with the American Chemistry Council, told the Senate Environment and Public Works Committee this week that some forms of PFAS are not water soluble and should not be blamed for drinking water contamination.

"You can't treat all these PFAS chemistries the same. That's why you can't have a one-size-fits-all approach," she said, citing the broad approach of some bills.

A bill from Sen. <u>Kirsten Gillibrand</u> (D-N.Y.) would require the EPA to set a drinking water standard for all PFAS, and there's similar legislation in the House. Others would ban new uses or development of PFAS chemicals.

Environmentalists argue the chemicals will continue to spread without sweeping action.

"If we don't regulate them as a class, we're going to be on this treadmill of trying to regulate one at a time, and we'll never get off of it," Erik Olson, the health program director at the Natural Resources Defense Council (NRDC), told House members at a hearing earlier this month.

Some Republicans worry taking sweeping action would sidestep the EPA and force Congress to weigh the science, and potentially invite lawsuits from companies.

"States would face significant unfunded mandates, while foisting obligations on private parties who are currently unaware of potential liability — like farmers using biosolids from wastewater treatment facilities to improve soil health," Rep. <u>Greg Walden</u> (Ore.), the top Republican on the House Energy and Commerce Committee, said at a recent PFAS hearing. "All of this is likely to result in litigation to prevent or prolong the situation, rather than move to promptly address contamination."

Democrats have not yet committed to regulating all classes of PFAS, instead asking experts like Olson to weigh in, but there is broad consensus that the EPA response to PFAS has been lacking.

"EPA has given us little reason for confidence that they will act with the urgency that impacted communities know is needed," said Rep. <u>Paul Tonko</u> (D-N.Y.), lamenting that it would be years before the agency can set a drinking water standard. "One thing is clear: We cannot wait for EPA to act."

EPA will decide by the end of the year whether they want drinking water standards for PFAS, what is known in the agency as a maximum contamination level (MCL).

But critics of the agency say they've been dragging their feet on a decision that should have been made shortly after the Obama administration recommended in late 2016 that water should not contain more than 70 parts per trillion (ppt) of PFAS.

The EPA declined an interview request for this story and would not comment on any pending legislation.

In the absence of action from EPA, eight states have passed their own drinking water standards, many of them lower than the 70 ppt level that EPA recommends.

Rep. <u>John Shimkus</u> (R-Ill.), ranking member of the House Energy and Commerce Subcommittee on Environment and Climate Change, said Democrats were rushing to regulate PFAS by legislative fiat rather than giving EPA time to review the chemicals.

"We cannot only support the use of science or public input when it guarantees our preferred policy solution," he said in a mid-May hearing on PFAS, saying that role should lie with EPA and not Congress.

Shimkus is inclined to support some of the bills, but added, "I have too many questions about the wholesale regulation of this large class of chemicals."

The EPA is not the only agency to come under fire for moving slowly on PFAS.

The Department of Defense (DOD) is facing a \$2 billion cleanup tab, and senators have expressed concern over <u>behind-the-scenes maneuvering</u> from the Pentagon to get EPA to scale back future PFAS regulations and save the military millions of dollars.

Some worry the military won't clean up the chemicals without a push from Congress.

"I think a lot of us learned in kindergarten that if you make a mess, you clean it up," said Olson with the NRDC. "Maybe the Department of Defense didn't learn that lesson in kindergarten and a lot of polluters did not ... It's important to hold those polluters accountable, whether they are federal agencies or private companies."

The Pentagon would not comment on pending legislation but denied the military has tried to weaken EPA's approach and said they support EPA setting cleanup standards.

"DOD is not seeking a different or weaker cleanup standard but wants the standard risk-based cleanup approach that is based on science and applies to everyone," said Pentagon spokeswoman Heather Babb.

Congress secured some funding for cleanup last year, though not enough to tackle the problem. This year's budget would also include funding, though several other bills more specifically outline the military's obligations for cleaning up contaminated water.

Stabenow, alongside Sens. Marco Rubio (R-Fla.) and Gary Peters (D-Mich.), sponsored one such bill, dubbed the "PFAS Accountability Act." It would give the military a year to develop a cleanup plan with the state requesting it, and access to grants to help fund the process. If the military misses that deadline, they have to report to Congress.

The latest version of this year's defense budget would include a measure similar to Stabenow's and also bar DOD from using firefighting foam that contains PFAS.

Finding a consensus on how to push EPA and the Pentagon, though, will be a challenge.

"This is very expensive and pretty much connected to every military base," Stabenow said of the contamination. "We want to hold them accountable and move forward to address this."

Dayton Daily News: Sen. Portman calls environmental agency's process "rigorous yet lengthy." https://www.daytondailynews.com/news/local/bill-seeks-speed-epa-approach-wright-patt-dayton-contaminant/KYUMnIIg2EjlpeFqdvdPSO/

A new bill in the U.S. Senate aims to help identify the health effects of a type of contaminant found in drinking water supplies near Wright-Patterson Air Force Base and a Dayton firefighter training center.

U.S. Sen. Rob Portman, R-Ohio, sponsors the bill called the Safe Drinking Water Assistance Act. The bill would address barriers that limit the government's response to the chemicals called PFAS, found in man-made firefighting foam, his office said.

The bill would also expedite analysis of the chemicals and provide support and resources to states dealing with them, the office said. The bill also proposes efforts to identify the health effects of cyanotoxins, the toxin in the algal bloom that shut down Toledo's water supply in 2014.

Drinking water safety is one of the topics examined by the Dayton Daily News Path Forward project, which digs into solutions for the most pressing issues facing the community.

For several years, Wright-Patt officials have faced concerns about PFAS, formally known as per- and polyfluoroalkyl substances. Last year, the city of Dayton found PFAS in the groundwater near the McFadden Avenue firefighter training center.

The city of Dayton runs the region's largest water system, which includes several other Montgomery County communities.

Existing law requires the Environmental Protection Agency to identify and analyze emerging contaminants, but Portman's office said actions to monitor and treat contaminants is often delayed due to "the rigorous yet lengthy nature of EPA's multi-step review process."

"This legislation will help the federal government more efficiently and effectively analyze the impacts of, and respond to, emerging contaminants through greater coordination among federal agencies, and will provide states with the resources they need to monitor, test, and respond to potential risks posed by emerging contaminants," Portman said in a statement.

Activists like Bill Walker said the encroachment of PFAS in the water is "rooted in the failure of federal chemical regulation."

Walker, vice president of the Environmental Working Group, said PFAS presents "the biggest drinking water contamination crisis in the country right now and certainly for quite some time."

"We still believe this is basically the tip of the toxic iceberg," Walker said.

The Dayton Daily News earlier this year reported Dayton and Wright-Patt are working to keep the chemicals out of regional drinking water, but progress is slow because federal agencies have not set safety levels for some chemicals or funded clean-up efforts of groundwater contamination.

The bill would direct the EPA to give support and technical assistance to communities that have detected emerging contaminants in their water supply. It additionally would establish and maintain a database of resources to assist states and water utilities with testing for contaminants. The bill also would direct certain federal agencies to create inter-agency working groups to coordinate the federal response and research strategy.

Cheers, R.

Robert Daguillard
Office of Media Relations
U.S. Environmental Protection Agency
Washington, DC
+1 (202) 564-6618 (0)
+1 (202) 360-0476 (M)